Building a Clonidine Protocol for Better Outcomes

Dr. Beth Goundry, Dr. Helena Lee

Queen Elizabeth University Hospital, Glasgow & Prince & Princess of Wales Hospice, Glasgow

Clonidine background

- Limited evidence of use within Palliative Medicine
- Nil data on chronic use, nil recent data on oral use
- No Local or National Protocol
- Not included in Scottish Palliative Care Guidelines

Previous QIP

- November 2022 - April 2024
- Variable prescribing and monitoring practice
- *'Tolerated useful alternative for patients with complex pain and distress not responding to more standard medications*.'
- '*More robust documentation of indication and benefits of these medications needed help build the evidence base around the use of clonidine in a Palliative Care setting'*

Further data collection

- November 2024 – February 2025
- Use in 6 patients – difficult to draw firm conclusions
- Ongoing variable prescribing practice Documentation inconsistent
- Nil observed difference in efficacy between PO or SC
- Preference for PO route - less invasive in chronic use
- Chronic use tolerated

Protocol inception → Consultation with Hospice Staff → Revision based on Staff feedback → Protocol development → Presentation to Clinical Governance Board → Staff Education → Roll out in PPWH Inpatient unit

CLONIDINE

Treatment initiation and monitoring protocol for:

Pain unresponsive to standard treatments and refractory agitation in the imminently dying

For other indications, please reference PCF

Agitation-Sedation Scale (RAAS)

+4	Combative
+3	Very agitated
+2	Agitated
+1	Restless
0	Alert and calm
-1	Drowsy
-2	Light sedation
-3	Moderate sedation
-4	Deep sedation
-5	Unrousable

Responsiveness to treatment

Fully 1	No new drugs added No up-titration required
Partially 2	Additional drugs added Titration of other drugs required Clonidine continued
Ineffective 3	Discontinued – lack of benefit/ not tolerated
Uncertain 4	Contemporaneous co-prescription Rapid deterioration

Pain Assessment Score Key

0 – 10

0 = no pain

10 = pain as bad as you can imagine

Dosing – as per PCF

If pain does not respond to loading doses, benefit from further doses is unlikely

Pre-initiation Considerations

Is the patient ambulant?

- Baseline BP and HR required

Medical History of

- Ischaemic heart disease, peripheral vascular disease, renal impairment, stroke

Loading/ test doses	75 microgram SC (or PO*) If no benefit, repeat after 1-2 hours
Bolus dosing	Daily starting dose is twice the required loading dose - 75 – 150 microgram SC (or PO*) BD to TDS If two loading/ test doses were required for benefit, start with 300 microgram/24 hours in divided doses
CSCI	150microgram/24h CSCI If two loading/test doses were required for benefit, start with 300microgram/24h CSCI
PRN	75 – 150microgram SC (or PO*) up to TDS
Titration	If PRN doses are required and beneficial, titrate every 1-2 days

Notes

- Bioavailability (75 -100%) suggests a PO:SC ratio of approximately 1:1, but oral bioavailability appears to vary with repeated dosing
- *Consider PO regime if SC route not appropriate/practical
- Half-life prolonged in renal impairment (CrCl <30ml/minute); consider halving 24 hour dosing
- Typical effective dose 300 – 600 microgram/24 hours
- Sublingual and topical routes are also available

Patient label

Clonidine Monitoring Sheet

Primary Diagnosis:

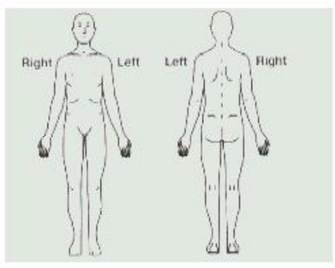
Indication:

- Pain
- Pain and agitation
- Agitation
- Other (give details)

Pain type:

- Neuropathic Pain
- Inflammatory pain
- Bone pain
- Mixed pain
- Spasticity or rigidity

Put an X on the site of pain



Record BP and HR for ambulant patients **at initiation and following dose titration**

- Routine monitoring of HR and BP is not necessary in non-ambulatory patients unless symptomatic
- Inform medical staff if -
  - Symptomatic orthostatic hypotension
  - Systolic BP <90mmHg
  - HR <60bpm

Baseline Observations pre initiation

HR.....

BP.....

Patient label

Scores	Pre loading/test dose	Post loading/test dose
Pain		
RAAS		
Clinical Response		

Date	Dose	Frequency	Route	BP	HR	Pain score 0 to 10	RAAS +4 to -5	Clinical response 1 to 4

Future direction and further work

Collaborative working with the Professional Lead for the Scottish Palliative Care Guidelines

Development of Medicines information leaflet

To sit under red section 'for specialist use only'

Implementation of the draft treatment initiation and monitoring protocol at PPWH

Feedback from team on protocol

Data Collection Tool development to facilitate analysis of outcome measures

Initiation & dosing regime using PO route

Monitoring for any perceived variability in oral bioavailability with repeated dosing

Long term side effects/complications

Use in subgroups including Parkinson's

References

- Wilcock A, Howard P, Charlesworth S (2022) Palliative Care Formulary 8th Edition
- Howard P (2024) Isle of Wight Palliative Care Symptom Control Guidelines
- Howard P, Curtin J. Efficacy and safety of subcutaneous clonidine for refractory symptoms in palliative medicine: a retrospective study. *BMJ Supportive & Palliative Care* 2023;**13:**e820-e824.